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SEASONAL INFLUENZA ACTIVITY

Last week, influenza activity continued to decrease in most regions of the United States. Michigan continues to report 'local' influenza activity. See [MI Flu Focus](#) for more influenza surveillance updates.

National News

- CDC's [FluView](#) (week ending March 29, 2014)
 - 82 flu-associated pediatric deaths have been reported for the 2013-14 season
- [Four new flu deaths reported last week in North Carolina, death toll climbs to 96](#)
- [57 have now died in Arkansas due to flu this season, second-highest total on record](#)

INFLUENZA-RELATED JOURNAL ARTICLES

- [Low 2012-13 influenza vaccine effectiveness associated with mutation in the egg-adapted H3N2 vaccine strain, not antigenic drift in circulating viruses](#)
 - Canadian scientists suggest mutations occurred when H3N2 reference strain recommended for vaccine was adapted to make it grow well in eggs
 - Mutations were associated with reduced vaccine effectiveness of vaccine's H3N2 component
 - See this [CIDRAP article](#) on the study
- [IL-15 adjuvanted multivalent vaccinia-based universal influenza vaccine requires CD4+ T cells for heterosubtypic protection](#)
 - Vaccine uses live vaccinia (cowpox) virus, protected mice against H7N9, H3N2, pH1N1, and H7N7
- [Serologic evidence of influenza A\(H1N1\)pdm09 virus in northern sea otters](#)
 - Results show sea otters are susceptible to infection with influenza A virus, complex nature of interspecies transmission of flu viruses in marine environment

MI IMMUNIZATION TIMELY TIPS NEWSLETTER

The April issue of the MI Immunization Timely Tips newsletter has been [released](#). This month's issue includes information on National Minority Health Month (April), National Infant Immunization Week (April 26-May 3), and the dates and locations of the 2014 MDCH Fall Regional Immunization Conferences.

CDC PRESS RELEASE: FLU VACCINE AND ICU IN KIDS

The Centers for Disease Control and Prevention issued a [press release](#) on March 27 about a study in the *Journal of Infectious Diseases* that showed flu vaccination reduced a child's risk of being admitted to a pediatric intensive care unit for flu by an estimated 74%.

AVIAN INFLUENZA A (H7N9) NEWS AND ARTICLES

The global outbreak total has now reached [410 cases](#) with 124 deaths since February 2013. The United Nations [Food and Agriculture](#) Organization is urging people to stay vigilant during the Qingming Festival on April 5. It is a 3-day holiday and involves increased poultry purchases, slaughter, and consumption, and travel in the region.

- WHO: [Human infection with H7N9 - update](#) (April 3)
- [Ultrastructural fingerprints of avian influenza A\(H7N9\) virus in infected human lung cells](#)
 - Found formations in the cells which have been seen in only a limited number of flu A viruses before
- [Epidemiologic characterization of 30 confirmed cases of human infection with avian influenza A\(H7N9\) virus in Hangzhou, China](#)
 - Researchers looked at cases from April 1-May 1, 2013
 - Most were retired, 60 years and older, men
 - Environmental testing: H7N9 positive rate highest in a district with just 2 confirmed cases, other districts with lower rates linked to higher number of cases

AVIAN INFLUENZA A (H5N1) NEWS ARTICLES

- [Laos reports H5N1 return after 5-year hiatus](#)
- [New drug application for cell-cultured H5N1 vaccine gets approval in Japan](#)
- [Grappling with avian flu, Cambodians wait for compensation](#)

OTHER INFLUENZA-RELATED NEWS

- [Microneedle patch may increase influenza immunization rate](#)
- [University of Rochester awarded \\$2.9M to study influenza](#)
- [Netherlands overhauls biosecurity rules as avian flu dispute simmers](#)

FLU WEBSITES

www.michigan.gov/flu
www.cdc.gov/flu
www.flu.gov
<http://vaccine.healthmap.org/>

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